

U.S. Environmental Protection Agency Great Lakes National Program Office (GLNPO) Significant Activities Report

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Long-Awaited Ashtabula River Cleanup Begins

On June 5th, USEPA Administrator Steve Johnson joined Ohio Governor Bob Taft, U.S. Rep. Steven C. LaTourette, other government officials and local partners in Ashtabula, Ohio, to celebrate the beginning of a \$50 million project to clean up contaminated sediment from the Ashtabula River, a tributary to Lake Erie and an Area of Concern.

The federal-state-local cleanup project will be carried out under the Great Lakes Legacy Act of 2002, a special initiative aimed at cleaning up 31 toxic hot spots known as Areas of Concern around the Great Lakes. The Ashtabula River cleanup is Ohio's first Legacy Act project. While three earlier Legacy Act cleanups have addressed smaller hot



Ohio Governor Bob Taft listens to USEPA Administrator Steve Johnson's remarks at kick-off of Great Lakes Legacy Act Cleanup of the Ashtabula River

spots, the Ashtabula project will comprehensively address an entire Area of Concern.

USEPA in cooperation with the Ashtabula City Port Authority (the non-federal sponsor) will clean up 500,000 cubic yards of PCBcontaminated sediment from a one-mile stretch of the river. Costs are being split evenly by USEPA and the Ashtabula City Port Authority and its partners. Speaking at the event, Ohio Governor Bob Taft said "The Ashtabula River dredging is an outstanding example of what can be accomplished when federal, state and local government come together with business to achieve one goal. The State of Ohio is proud to invest \$7 million to help match the federal investment and advance the cleanup and restoration of the Great Lakes."

The work is being done in close cooperation with the U.S. Army Corps of Engineers and is scheduled for completion in 2008. The Corps will also conduct navigation dredging

downstream of the project area and will complete its work in 2009.

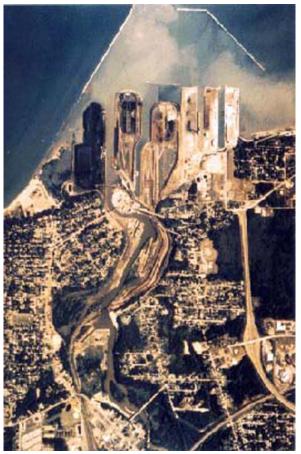
According to USEPA Administrator Steve Johnson, "Thanks to President Bush's Great Lakes Legacy Act, instead of posted warning signs, Ashtabula's banks will once again be covered with fishing poles. Just like a father handing down the skills of tying a fishing lure, EPA and our partners are determined to hand down a cleaner, healthier river to the next generation of Ashtabula anglers."

Additional information about the Ashtabula River cleanup is available online at: http://www.epa.gov/greatlakes/sediment/legacy/ashtabula/index.html (Contact: Scott Cieniawski, cieniawski.scott@epa.gov, 312-353-9184)

Ashtabula River Baseline Studies

USEPA GLNPO, in collaboration with the USEPA Office of Research and Development (ORD), kicked off a unique assessment project on the Ashtabula River. From June 7th to 14th, GLNPO collected 35 surficial sediment samples in the section of the Ashtabula River slated for remediation under the Great Lakes Legacy Act. GLNPO's Dave Wethington is the project and site lead for the sampling and analysis, supported by staff from Battelle and the R/V Mudpuppy crew. The surface sediment samples will be analyzed for sediment chemistry, toxicity, and bioaccumulation potential. Additionally, caged fish were deployed on June 14th to begin a 28-day exposure period, after which they will be collected and analyzed for contaminant uptake. The GLNPO component of the assessment focuses on evaluating baseline conditions by which the future success of the remediation project can be measured.

ORD will be commencing field work in late July to begin the first of three phases of an



An aerial view of the Ashtabula River. Ohio

intensive study examining sediment resuspension and dredging residuals. Researchers from ORD will also be performing biological studies to evaluate the immediate impacts of contaminant removal on ecosystem measures of health, and evaluating the long-term ecosystem changes in response to dredging. The initial phases of both GLNPO and ORD assessments are scheduled for completion before the scheduled initiation of dredging activities in early September 2006.

(Contact: Dave Wethington, 312-886-1437, wethington.david@epa.gov)

Wildlife-Friendly Wind Power

The "Toward Wildlife-Friendly Wind Power: A Focus on the Great Lakes Basin Conference," funded by GLNPO, took place June



Offshore wind turbines (Photo courtesy of Sandia National Laboratories)

27th to 29th at the Hilton Toledo and Dana Conference Center in Toledo, Ohio.

GLNPO's sponsorship of the conference was conducted on behalf of the Habitat team and the Lake Erie LaMP under the auspices of the Great Lakes Collaboration's charge that EPA coordinate and facilitate Great Lakes efforts when multiple Federal agencies are involved. Co-sponsored with the U.S. Fish and Wildlife Service, U.S. Geological Survey, and Illinois Natural History Survey, the conference provided state and local regulatory agencies with information on the potential wildlife impacts from wind power. Approximately 150 people, including wind energy and wildlife experts from the United Kingdom, Canada and from across the U.S., attended the three-day plenary session that included potential impacts of wind energy to birds, bats, and offshore habitats, assessment of tools to protect wildlife, and frameworks for permitting of wind energy projects. The Marcy Kaptur, U.S. Congresswoman from the Ohio 9th District, opened the conference with a videotaped presentation. Great Lakes

states, Tribes, industry and not-for-profit organization representatives participated in panel discussions about agency preparedness for wind energy siting and non-governmental perspectives. Priority research needs were identified. A group of conference participants will carry on the discussions. One highlight of the three-day event was a report-out on the status of a GLNPO-funded Interagency Agreement with the U.S. Fish and Wildlife Service to improve radar-imaging of bats in Neda mine, Wisconsin in order to demonstrate that the technology can better inform wind-tower develops and regulators as they seek sites that cause minimal impact to wildlife. Conference PowerPoint presentations, meeting notes, and other wind power information will be posted to the following website soon: http://www.fws.gov/midwest/ greatlakes/windpowerpresentations.htm.

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Lake Erie Floating Classroom

Sixteen teachers from around the Great Lakes Basin representing grades 4 through 10 set sail from Cleveland, Ohio on June 18th as participants in the first annual Center for Ocean Sciences Education Excellence (COSEE) Great Lakes Shipboard and Shoreline Science workshop. The teachers will travel to ports throughout Ohio's Lake Erie coastline while learning about the Great Lakes through classroom instruction and hands-on experiences on shore and aboard GLNPO's 180-foot research ship, *R/V Lake Guardian*.

Also offered as an Ohio State University Stone Laboratory course, the workshop gave



COSEE instructor Helen Domske (New York Sea Grant) lectures on invasive species aboard the Lake Guardian Lake Erie course for teachers

the teachers from four Great Lake states a chance to work with scientists to collect and analyze data about water quality and organisms in Lake Erie as they traveled from the shallowest to the deepest parts of the lake. The participants also learned about navigation and shipping on the lakes, music and literature of the inland seas, curricula for teaching, and shoreline activities that affect lake conditions.

Days were spent on the water cruising between sampling stations, while evenings were opportunities to visit special habitats and informal learning sites on shore near ports of call on the Lake.

To share the workshop experience with others, the participants created blogs online while the course was underway. To read the blogs and to see photos from the workshop, go to: http://coseegreatlakes.blogspot.com.

Each summer for the next four years, the COSEE Great Lakes program and GLNPO will support another Shipboard and Shoreline Science workshop. In 2007 the voyage will be on Lake Ontario, and following summers will include Lakes Superior, Huron and Michigan. A Great Lakes Education Summit

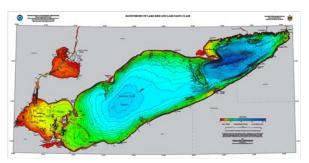
in 2010 will bring these and other COSEE Great Lakes efforts into focus for their impact on science literacy in the Great Lakes region.

COSEE Great Lakes, formed by a grant from the National Science Foundation and NOAA-National Sea Grant, is the tenth center in a nationwide network. COSEE Great Lakes is expected to create dynamic connections between Great Lakes and ocean research and education with the goal of enhancing scientific literacy and environmental stewardship.

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Lake Erie D. O. Tested

The first two of five surveys to measure dissolved oxygen in Lake Erie's Central Basin took place on June 7th - 8th and June 27th - 28th. These surveys looked at the beginning conditions in the lake, as the waters warm, and stratification (layering of warm water atop a colder layer) is beginning. The amount of oxygen held in the cold bottom layer is all that will be available for the rest of the Summer for fish, plankton, bottom dwelling invertebrates and microorganisms that live there. Surveys later in the year will document the decrease in oxygen as it is used by these



Lake Erie bathymetry showing Central Basin (graphic courtesy of NOAA)

creatures, and particularly by the bacterial decay of material raining down from the warm, upper layer where algal growth continues throughout the summer. These measurements made by GLNPO have documented the continuing problem of oxygen depletion in this large, important part of Lake Erie.

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Air Monitoring Results Shared

On June 12th, Dr. Ron Hites of Indiana University, the current Integrated Atmospheric Deposition Network grantee, presented results from the IADN network. IADN data shows that most legacy pollutants are decreasing with half lives of 10 years (for PAHs and PCBs) to 3 years (for a-HCH). PAHs, PCBs, dioxins, and PBDEs are much higher in cities than in remote areas; some pesticide concentrations are higher in remote (agricultural) areas. The Lakes are close to air-water equilibrium for many legacy compounds (though there may be areas of net input near urban or other source areas). IADN works well for tracking atmospheric concentrations and finding new problems. For example, Dechlorane Plus, a chlorinated flame retardant, and TBE, a brominated flame retardant that is a likely replacement for octa-BDE, were both discovered by investigating unidentified chromatogram peaks from IADN air samples. Dr. Hites also met with GLNPO to discuss his future plenary presentation at the SOLEC meeting in November and IADN operations.

(Contact: Melissa Hulting, 312 886 2265, hulting.melissa@epa.gov)



East Bay Marshes, Lake Ontario

LAKEWIDE PLANNING

Developing a Lake Ontario Biodiversity Conservation Strategy

GLNPO and USEPA Region 2 staff attended the June 20th to 23rd, 2006, "A LaMP-based Biodiversity Conservation Strategy for Lake Ontario Workshop" with Canadian and U.S. partners. Attended by approximately 50 people from U.S. and Canadian federal, state/ provincial, and not-for profit organizations, and the Great Lakes Fishery Commission, the focus of this first of four workshops was to identify the natural resource targets for the Lake Ontario basin. These key species, natural communities, ecological systems and abiotic processes will serve as focal targets for planning and conservation actions. Maps of Lake Ontario basin coastal wetlands, land use/habitat classification, shoreline geomorphology, and plant/animal targets were provided by The Nature Conservancy's Great Lakes Office. The group concluded that migratory fish, coastal wetlands, fluvial systems, benthic offshore habitats, island dependent species, offshore pelagic, and nearshore and littoral habitats are major targets for conservation. Subsequent workshops will focus on identifying threats to these targets, strategies to abate the threats, and measuring success of conservation strategies to be undertaken. The workshops are funded by

USEPA through the GLNPO grant servicing intermediary, the National Fish and Wildlife Foundation.

(Contact: Karen Rodriguez, 312-353-2690, rodriguez.karen@epa.gov)

Lake Superior Work Group

The Lake Superior Work Group met in Duluth, Minnesota on May 30th and June 1st. About 50 members from state, federal, tribal and provincial agencies attended including representatives from Michigan Department of Environmental Quality, Wisconsin Department of Natural Resources (WDNR), Minnesota Pollution Control Agency (MPCA). Great Lakes Indian Fish and Wildlife Commission, U.S. Fish and Wildlife Service (USFWS), U.S. Forest Service, USEPA, Environment Canada, Ministry of the Environment, Ministry of Natural Resources, USEPA-Duluth Lab, Chippewa-Ottawa Resource Authority, Fond Du Lac Tribe, Bad River Tribe, National Park Service-Apostle Islands, Minnesota Sea Grant and UW-Extension. Topics included the following:

- Presentation of a GLNPO-funded project "Invasives Free Zone" by the U.S. Fish and Wildlife Service. The goal of this project is to create an invasive-free zone by eliminating non-native invasive terrestrial and emergent aquatic plants on the Whittlesey Creek National Wildlife Refuge, associated private lands and adjacent U.S. Forest Service property (720 acres in total). 21 invasive species have been identified to date; each will be mapped and monitored and treatment and management plans developed.
- Presentation by USEPA Duluth Lab (Jack Kelly) on an "Early Detection" Monitoring pilot project in Duluth-Superior Harbor. The target objective is to "detect rare before it becomes com-



Sun sets over Chequamegon Bay on Lake Superior

mon". A "model" approach for vulnerable embayments will ultimately be developed. The three components of the pilot include sampling, taxonomic and lab methods and GIS-based information (vectors, habitats). Through this pilot, 4 species new to Lake Superior were detected (faucet snail, Lumholtz's water flea, Henslow's pea clam and hump-backed pea clam) and two species new to Duluth-Superior Harbor were detected (Ischium sideswimmer and the New Zealand mud snail). (For further information: Jack Kelly, USEPA-Duluth Lab, 218-529-5119, kelly.johnr@epa.gov)

- Presentation on the status of all the Lake Superior Areas of Concern (AOCs). Of particular interest was the St. Louis River AOC plan, being drafted by MPCA with help from WDNR, the St. Louis River Citizen's Action Committee and a consultant hired by the WDNR. For the first time, a long-term, complete, remediation plan has been formulated by the key agencies and Remedial Action Plan groups involved in the St. Louis River AOC. The remediation plan envisions spending about \$100m over 20 years to complete cleanup by 2026. The draft workplan has been submitted to USEPA for approval and funding.
- Presentation by Jesse Schomberg of Minnesota Sea Grant on the proposed Lake

Superior Conference in 2007. The conference, to be held at the end of October 2007 in Duluth, Minnesota, will focus on researchers, educators, local land use officials, interested citizens, scientists, public policy experts, students of all ages and municipalities to report on progress and to help set a research, outreach and education agenda for Lake Superior. The conference will closely follow the 8 subject areas of the Great Lakes Regional Collaboration, as well as other critical areas of high interest of stakeholders, i.e., mining, hydro dams, climate change and better outreach to youth. In addition, the Lakewide Management Plan will be used as the framework for highlighting, prioritizing and implementing recommendations.

Other presentations/topic areas including:

- A demonstration by Clancy, the mercury sniffing dog;
- Demonstration of a lumex, (mercury detection instrument);
- Discussion of a pilot "aquatics invasives" complete control project in Lake Superior;
- A status report on the Lake Superior Chemical Milestones Report; and
- Development of tangible, quantifiable ecosystem goals for Lake Superior Habitat, Terrestrial Wildlife and Aquatics Committees.

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Lake Michigan Forum

The Lake Michigan Forum met in Merrillville, Indiana on June 20th and 21st. Attending from GLNPO were Lake Michigan Team Manager Judy Beck, Laura Evans and intern Melissa Simon. Sue Brauer of USEPA Region 5 Waste Pesticides and Toxic Sub-



Sleeping Bear Dunes on Lake Michigan

stances Division was also in attendance. The Forum business portion of the meeting included a review of the first three chapters of LaMP 2006 and discussions of adoption of some of some of the next steps outlined in LaMP 2006. High priority was given to Green Marina and Ports in conjunction with mercury issues. An overview of the Great Lakes Water Quality Agreement review was presented and followed by a two-hour field trip to view restoration projects in the Area of Concern area led by Alex DaSilva, Indiana Department of Environmental Management Remedial Action Plan Coordinator and featured the Ivanhoe School (GLNPO-funded) restoration as one of the sites. Guides included Daniel Goldfarb, of the Wildlife Habitat Council. David Behrens of USX Gary Works, and Rodney Littleton of Groundworks Gary.

The second day's agenda included an Environmental Management Systems roundtable discussion with participation from Jim Flannery from Indiana Harbor Mittal Steel USA, Inc.; Rob Maciel from Burns Harbor Mittal Steel; Brad Stewart from BP; and Gregory Costakis from EH&S - Generation NiSource. The second discussion was a presentation by Peter Wise of the Delta Institute on the background of the Great Lakes and the pending Annex 2001 Charter regulating water withdrawals from the Lakes. The atten-

dance was close to 60 participants including members of the Indiana House and Senate.

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Upcoming Events

2006

- September 19 Great Lakes Binational Toxics Strategy Integration Workgroup Meeting, Chicago, Illinois
- October 11-13 Second International Symposium on the Lake Huron Ecosystem, Honey Harbor, Ontario Canada
- November 1-3 State of the Lakes Ecosystem Conference (SOLEC) 2006
 Milwaukee, Wisconsin
- December 6-7 Great Lakes Binational Toxics Strategy Stakeholder Forum and Integration Workgroup Meeting, Chicago, Illinois

We welcome your questions, comments or suggestions about this month's Significant Activities Report. To be added to or removed from the Email distribution of the Significant Activities Report, please contact Tony Kizlauskas, 312-353-8773, kizlauskas.anthony@epa.gov.